



July 25, 2011 **RE-ISSUED 2/06/2012**

NORWECO, INC.
SALES DEPT.
DON BACH
220 REPUBLIC ST
NORWALK OH 44857-1196

Re: Description: SEWAGE TREATMENT SYSTEMS, AERATED (also see SEWAGE TREATMENT APPARATUS)
Manufacturer: NORWECO, INC.
Product Name: SINGULAR GREEN ®
Model Number(s): 960-500/GREEN TNT-- FOR DOMESTIC WASTEWATER TREATMENT

3-COMPARTMENT PLASTIC TANK WITH SINGULAR ® AERATOR, A TERTIARY TREATMENT DEVICE, MIDDLE AERATION TANK AND APPROVED EFFLUENT FILTER IN THE THIRD COMPARTMENT; ALL CONCRETE TANKS MUST HAVE STATE-APPROVAL

(36 IN. MAX. DEPTH OF BURY; MAX. DFW 500 GPD; MAX. 1.2 LBS. BOD5/DAY; MIN. 450 GAL. CAPACITY UPSTREAM SEPTIC TANK; RISERS 6-72 IN. HIGH; ACTUAL CAPACITY 1300 GALS.; TANK DIMENSIONS = 123 IN. L X 78 IN. W X 66 IN. H)

[SUSPENDED GROWTH MEDIA; BIO-KINETIC WASTEWATER SYSTEMS, CHLORINE DOSED SYSTEM CONTAINED IN 3-COMPARTMENT TANK WITH AERATOR AND BK-2000 EFFLUENT FILTER SYSTEM; OPTIONAL AT-1500 UV SYSTEM]

Product File No: 20110121

The specifications and/or plans for this plumbing product have been reviewed and determined to be in compliance with chapters SPS 382 through 384, Wisconsin Administrative Code, and Chapters 145 and 160, Wisconsin Statutes.

The Department hereby issues an approval based on the Wisconsin Statutes and the Wisconsin Administrative Code. **This approval is valid until the end of July 2016.**

This approval is contingent upon compliance with the following stipulation(s):

- This tank must be designed to withstand the pressures to which it will be subjected.
- The manufacturer must keep at the manufacturing plant a set of plans and specifications bearing the department's stamp of approval. The plans and specifications must be open to inspection by an authorized representative of the department.
- Installation and servicing of this product must be in accordance with the manufacturer's instructions. A copy of the manufacturer's installation and servicing instructions must be given to the owner of the system.
- This product must have a warning label located on the cover of the BIO-KINETIC system stating "WARNING DO NOT ENTER TANK. THE BIO-KINETIC SYSTEM MUST BE SERVICED FROM GRADE USING PROPER TOOLS AND EQUIPMENT. CONTACT YOUR LOCAL NORWECO DISTRIBUTOR FOR SERVICE."

- **When this product does NOT include the integral Bio-Kinetic UV system** and receives wastewater from dwellings, it will produce an effluent quality with a maximum monthly average value for BOD5 of less than or equal to 30 mg/L, TSS of less than or equal to 30 mg/L TSS and F.O.G. of less than 30 mg/L.
- **When this product includes the integral Bio-Kinetic UV system** and receives wastewater from dwellings, it will produce an effluent quality with a maximum monthly average value for BOD5 of less than or equal to 30 mg/L, TSS of less than or equal to 30 mg/L TSS and F.O.G. of less than 30 mg/L and fecal coliform of less than or equal to 10,000 cfu/100ml.
- This product must be installed downstream of treatment tank(s) recognized by this department to treat G.P.D. flow that will discharge to this product.
- When the Bio-Kinetic UV Disinfection System (AT1500) and the bulb or any other part of the UV System fails, the Service Pro Control Center will employ both audible and visual alerts.
- AERATOR: A SINGULAR ® AERATOR, providing 1725 rpm and 60 hertz, single-phase fractional HP motor is required of all installations and installed above grade.

Table 1
 INSPECTION AND MAINTENANCE
 PRODUCT/(Models) NORWECO
 SINGULAIR WASTEWATER TREATMENT SYSTEM
 (960-1000)

Initial/Startup Inspection/ Maintenance	Conducted by certified installer/local contractor
Routine Inspection/Maintenance	Six-month intervals
Ongoing Pumping Cycle And/Or Requirements	As required by state/local agents
Back-Wash Cycle	N/A
Effluent Performance Levels	Class I NSF
BOD5 Credit For Downsizing Distribution Area	YES*
Fecal Credit For Reduction Of Vertical Separation	SEE ABOVE STIPULATIONS
Additional Comments	Bio-neutralizer de-chlorination tubes not recommended in WI Manufacturer may require service agreement and trained personnel * See above stipulation

The department is in no way endorsing this product or any advertising, and is not responsible for any situation which may result from its use.

Sincerely,

Jean M. MacCubbin, CST
 Engineering Consultant--Plumbing Products Review
 DSPS WEST, Safety & Buildings Div.
 PO Box 2658
 201 W Washington Ave.
 Madison WI 53703-2658
 Phone: 608-266-0955; Fax: 608-283-7456
 E-mail: Jean.MacCubbin@WI.GOV